ABSTRACT

An alignment method capable of performing alignment without providing alignment marks on a mask and preventing a decline of exposure throughput and latent image contrast, an alignment substrate and the production method thereof, an exposure method, an exposure apparatus and a production method of a mask are provided. An alignment method including a step of transmitting a light or a charged particle beam from a first surface side of a thin film to a second surface side, reflecting the light or charged particle beam on a plurality of alignment marks arranged on the second surface side of the thin film but outside the thin film, detecting the reflected light or charged particle beam on the first surface side, and detecting positions of the alignment marks, and a step of obtaining position coordinates on the thin film; an alignment substrate used for the alignment method and a production method thereof, an exposure method for performing the alignment, an exposure apparatus and a production method of a mask are provided.